

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

FEB 17 2006

Serial No.: 10/708,979

Group Art Unit: 2859

Filed: 4/5/2004

Examiner: Dixomara Vargas

For: THERMAL SHIELD TO COLDHEAD
SLEEVE THERMAL CONTACT

Attorney Docket No.: GEMS 0219 PA

I hereby certify that this correspondence is being transmitted via facsimile (571-273-8300) to Examiner
Dixomara Vargas on:2/17/2006
(Date of Deposit)Kam Hopp
(Signature)AMENDMENT UNDER 37 CFR § 1.111Mail Stop Amendment
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner:

This paper is in response to the Office Action in the above-entitled application, mailed November 17, 2005, and allowing three months for response. This response is timely as it is filed within the three month period.

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Oath/Declaration objection

The oath was found to be defective for violating 37 CFR 1.56 for a) not stating acknowledgement of duty to disclose; b) not including a notary's signature; and c) not including a notary's seal and venue.

The Applicant, respectfully calls the attention of the Examiner to the fact that this is an improper rejection/objection. The language regarding acknowledgement of duty to disclose is clearly present in the declaration above the signatures. With regards to a notary's signature, seal, and venue, the Applicant notes that the Examiner is mistaken as to their requirement with regard to 37 CFR 1.56 and the MPEP's requirements for filing an oath. The oath is in compliance as filed.

Specification Objections

With due respect, the summary of the invention as filed is in complete compliance with 37 CFR 1.73 and MPEP 608.01(d). No where in the MPEP or any other regulation requires rewriting of claim terminology into "simpler terms more easily understood by the public". The specification defines the terms used therein and in the claims. The terms utilized throughout the specification and the claims are interpreted in light of the entirety of the specification. The substitution of alternative wording or claim terminology for the Summary would only serve to confuse term meanings and mislead the public into an improper understanding of patent range. The Summary as submitted is in complete compliance and the objection thereto is improper. The cited reference by the Examiner states the SPECIFICATION is a dictionary for claim terms... NOT the SUMMARY. Therefore, the argument that the summary does not support definitions of claim terms is spurious.

Claim Rejections under 35 USC 112, second paragraph

d) Claims 1,10 and 16 rejected as indefinite for use of the term "braid elements". The Examiner expressed concern the terms "braid" and "elements". The Applicant strenuously traverses this rejection. The term 'braid' is well known in the art, as well as in the spheres of public knowledge. The specification in paragraph 19 describes the preferred embodiment of the braided elements as copper. Those skilled

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in the art would have absolutely no questions or confusions regarding what a braided copper connector is. With regards to the use of the term "element", frankly the Applicant is at a complete loss as to the Examiner's basis for rejection. Where a relationship between the use of generic term "element" and a "means" clause asserted by the Examiner arises from is difficult to comprehend. The use if the term "element" to refer to a component of an invention is not only not unclear, its usage is prevalent throughout the vast majority of patents issued by the USPTO. It is clear, therefore, that the Applicant must not truly comprehend the basis of the Examiner's rejection and therefore seeks clarification or removal of the objection.

e) The term "cooler block" was considered unclear by the Examiner. The Examiner states "Is it a concrete block or a metal block?... is it a conductor or another type of conductive element? The Applicant traverses this rejection. The specification clearly states that the cooler block acts as a thermal path between the outer thermal shield and the cold head sleeve assembly (paragraph 19). Whether the "cooler block" is metal or concrete is not a limitation that needs be addressed by the claims. Claim language need not be a blueprint wherein a precise working model may be constructed therefrom. The term "cooler" is not indefinite. It is a term well known and understood in the art and is more than sufficient to appraise one skilled in the art of the scope of the invention.

f) The term "outer thermal shield" was considered unclear since it confuses the examiner as to "what has been shielded". The Applicant again traverses this rejection. The present invention is directed towards an MRI assembly with cryogenic cooling. Even those unskilled in the art would recognize the need for thermal shielding in order to prevent the cryogenic fluid from boiling off. Thermal shielding is used throughout the art and is well understood.

g) Claims 1 and 10 were rejected for omitting the structural cooperative relationship of the thermal shield with the coldhead sleeve. On the contrary, the claims specifically claim a relationship wherein the sleeve is connected to the cooler block by way of the braids and the cooler block connects to the thermal shield by way of the highly thermally conductive block. Thus all structural connections and relationships are adequately defined. If the objection was related to the lack of

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definition of the function of a coldhead sleeve within an MRI assembly, the Applicant notes that this is well known in the art and not necessary to define within the claims.

h) Claims 1 and 10 are rejected for omission essential elements associated with the "cold head sleeve assembly". Again the Applicant is genuinely confused. A coldhead and the sleeve it is mounted to are well known to anyone in the art. To define their every component and exact makeup would be to require to describe that exact manufacturing of a spark-plug in a patent directed towards a new and novel engine. This type of operational detail is inappropriate in a patent application and is not representative of an "omission" but rather is representative of proper patent drafting practice.

i) The recitation "magnetic resonance imaging assembly" was determined to not be given patentable weight. Although the Applicant disagrees, it seems immaterial in light of the failure of the office action to reject any claims based on prior art.

j) Claim 16 was rejected for omitting steps on maintaining the temperature in what components of the MRI system. The Applicant traverses this rejection. Each step constitutes transferring the thermal energy away from the thermal shield. It is unclear to the Applicant how this does not comprises controlling temperature as claimed.

The rejections and indefiniteness arguments presented in the office action have not been made with proper consideration for one skilled in the art. Therefore, the rejections should be reconsidered.

With this response, it is respectfully submitted that all rejections and objections of record have been overcome and that the case is in condition for allowance.

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Should the Examiner have any questions or comments, he is respectfully requested to contact the undersigned.

Respectfully submitted,



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